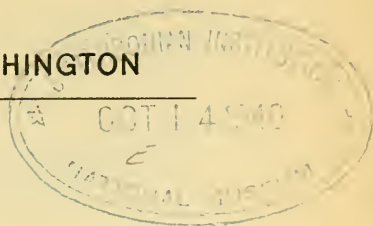


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



REPORT ON AN HERPETOLOGICAL COLLECTION
FROM THE SIERRA MADRE MOUNTAINS
OF CHIHUAHUA.

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The material on which the following report is based was collected by one of us (Knobloch) during the summer of 1939. Since the fauna of the Sierra Madre Occidental is but little known it seems important that the following records be published.

A specimen of *Crotalus*, perhaps related to *lepidus* and a small series of Ambystomid larvae await further study. Two forms, an *Eleutherodactylus* and a *Lampropeltis* are believed to be new, and are described elsewhere¹ by the senior author. (Numbers refer to the E. H. Taylor-H. M. Smith collection).

Bufo simus Schmidt.

Bufo simus Kellogg, Bull. U. S. Nat. Mus., No. 160, 1932, pp. 63-68, fig. 14.

Several specimens in the collection Nos. 18485, 23020-23025 belong to a form which has the tympanum concealed. When more specimens are available from Western Mexico it may be possible to demonstrate that *Bufo monksiae* Cope² is a legitimate species to which the present specimens may be referred.

Hyla arnicolor Cope.

This species is represented in the collection by a single specimen, No. 23009.

Rana pipiens Schreber.

Two young specimens, Nos. 23059-23060, are referred to this form.

Phrynosoma orbiculare orbiculare Wiegmann.

Two specimens are referred to this form (Nos. 23046-23047). The femoral and preanal pore series are respectively 24-24, 25-26. The preanal

¹ Copeia 1940

² Cope, Amer. Philos. Soc., 18, 1879, pp. 263-264.

part of the series tends to form a double row of pits which meet medially or are narrowly separated. The crown of the head is a little broader and the head somewhat shorter than in a specimen from near Mexico City.

These specimens give no evidence of a closer approach to *Phrynosoma douglassii hernandesi* or *P. douglassii douglassii* than do specimens from the southern part of the plateau that are available to me. And in consequence I am inclined to question the wisdom of associating *douglassii* and *hernandesi* as subspecies of this species.

Holbrookia maculata approximans Baird.

A single, very young specimen, No. 23048, is in the collection. It is referred with some hesitancy to this species, since adult color and markings are wanting.

Sceloporus jarrovi jarrovi Cope.

Sceloporus jarrovi jarrovi Smith, Univ. Kansas, Sci. Bull., XXIV, 1936 (1937), pp. 624-631., pl. XLVII, fig. 1; text figs. 17, 18; Zool. Ser. Field Mus. Nat. Hist.; Vol. 26, 1939, pp. 226-229, figs. 32, 33.

The series of specimens in the collection, Nos. 18973, 18979, 23034-23044, are quite within the limits of variation which Smith (*op. cit.*) has recorded.

Sceloporus poinsettii Baird and Girard.

Sceloporus poinsettii Smith, Univ. Kansas, Sci. Bull.; XXIV 1936 (1937), pp. 606-617, pl. LI, fig. 1; text figs. 14, 15; Zool. Ser. Field Mus. Nat. Hist., Vol. 26, 1939, pp. 223-225, fig. 30.

Four specimens, Nos. 23030-23033, are in the collection. These are typical specimens, the largest measuring 117 mm., snout to vent.

Sceloporus microlepidotus disparilis Stejneger.

Sceloporus microlepidotus disparillis Smith, Zool. Ser. Field Mus. Nat. Hist., 1939, pp. 191-197, fig. 18.

Five specimens are in the collection, Nos. 18980-18981, and 23010-23012.

Sceloporus undulatus virgatus Smith.

Sceloporus undulatus virgatus Smith, Occ. Papers Mus. Zool. Univ. Michigan, No. 387, Oct. 31, 1938, pp. 11-14. (Type description; type locality, above Santa Maria Mine, El Tigre Mountains, Sonora, Mexico.)

Dr. Hobart Smith has had the kindness to examine this series of small scelopori, and refers them to this recently described subspecies. Nos. 18972, 23049-23052.

Gerrhonotus kingii Gray.

Gerrhonotus kingii Gray, Ann. Mag. Nat. Hist., Vol. I, 1838, p. 390 (type description; type locality unknown).

Gerrhonotus nobilis Cope, Rept. U. S. Nat. Mus., 1898 (1900), pp. 519–520, fig. 92.

This series of five specimens, Nos. 18982, 23026–23029, agree in pertinent detail with the figure given by Cope (*loc. cit.*) of an Arizona specimen.

There are 14 or 16 longitudinal rows of enlarged dorsal scales, there being strong variation in the size of the outer row of scales. The number of dorsal dark bands varies from 10 to 13 (youngest specimen). This latter specimen (No. 18982) has the transverse dark bands with the white edge usually confined to a single row of scales, although medially the darker part may encroach on the preceding scale row; the four larger specimens have the dorsal blackish or blackish-brown bands usually covering two whole rows and often one or two half rows as well. On the sides the bands are usually confined to two scale rows, rarely covering the whole of them. The groove of the lateral fold is largely black, and some faint blackish spots are discernible immediately below the fold. The ground color above varies from olive-gray to gray, occasionally with a faint reddish brown shade discernible. The head is variously marked with black; the side of head below eye whitish or cream with some black spots. Below the color is lemon yellow on underside of abdomen and tail; chin, throat and breast cream. There are some minute grayish flecks, but there are no distinct dark spots on each scale as is true of Arizona specimens.

Cnemidophorus perplexus Baird and Girard.

A single specimen of the species (No. 29061) is present in the collection.

Eumeces callicephalus Bocourt.

Eumeces callicephalus Bocourt, Mission Scientifique au Mexique et dans l'Amérique Centrale; Rept., Liv. 6, 1879, pp. 431–433, pl. XXII D, figs. 2, 2 a, 2 b, 2 c, and pl. XXII E, fig. 2 (type description, type locality, Guanajuato, Mexico, Dugès col.); Taylor, Kansas Univ. Sci. Bull., XXIII, 1935 (1936), pp. 290–298, pl. 23, and text figs. 44, 45. (Diagnosis states the adpressed limbs do not touch. However, in medium sized males the toes may touch).

The single specimen No. 23019 in the collection agrees with the characters recorded by Taylor (*op. cit.*). The postnasal is present on both sides; there are seven upper labials (the postlabial scale is large, elongate and may be mistaken for an eighth labial); the black stripe on the side which continues to base of tail is on parts of three scale rows but not more than two scale rows wide; the light stripe on labials continues through the ear, and can be traced as a grayish silver line to the hind leg. Dorsal color greenish gray, somewhat browner anteriorly; chin and throat white; head lines join on the nuchals, of which there are two on one side and three on the other.

Eumeces parviauriculatus Taylor.

Eumeces parviauriculatus Taylor, Proc. Biol. Soc. Wash., XLVI, Oct. 26, 1933, pp. 178-181, fig. 2; Univ. Kansas Sci. Bull., 1935 (1936), pp. 368-371, plate 31, fig. 5; text figs. 59, 61.

Two specimens are referred to this species, No. 18984, certainly, and No. 18983 with some doubt, since the latter lacks the head.

The first specimen agrees with the type (figured *loc. cit.*) save that the frontonasal is larger and forms a very broad suture with the frontal; in consequence the prefrontals are distinctly smaller. Probably the most distinctive characters of the species is the very large anterior temporal, the still larger lower secondary temporal, which exceeds the upper secondary in size, and the consequent reduction in the size of the sixth and seventh labials. These characters are clearly defined in this specimen. There is an ear lobe distinguishable, which was not observed in the type. There are twenty scales about body; 68 scales from parietals to above anus; and 24 scales about constricted part of neck. The specimen, preserved in formalin, is grayish black, the dorsolateral white lines visible from the snout to the base of the tail. The black lateral stripe is distinct to above the hind leg. The lateral white stripe beginning on the anterior labials extends only to arm, passing through lower half of ear; the very short limbs when adpressed are separated by about 18 scales. The subcaudal scales are not or but very slightly larger than adjoining scales. The snout to vent length is 57 millimeters.

The headless specimen has a clear bluish-gray coloration above with a greenish-white dorsolateral line. The black stripe on side is about 3 scales wide on the neck but only about the width of two scales posteriorly. The tail is grayish blue above and below; neck creamy-white the belly grayish. The limbs adpressed are separated by 18 scales. The body is extremely slender, its greatest width being 4.6 mm. The distance between axilla and groin is 22 millimeters. The length of the tail is 61.4 millimeters. There are 20 scales around middle of body. Despite the absence of the head I have but little hesitancy in regarding it a young specimen of this species.

Conopsis nasus Günther.

Conopsis nasus Günther, Catalogue of Colubrine Snakes; London, 1858, pp. 5-6 (type locality "California" in error . . . Probably western Mexico). *Contia nasus* Boulenger, Cat. Snakes British Museum, II, 1894, pp. 268-269 (*part*). (In the lists of specimens, six, collected by M. Sallé, are designated as "Types" (obviously incorrectly).)

A single juvenile specimen No. 23018 agrees fairly well with the type description save that there is a small loreal present.

Both Günther and Boulenger confuse with this species certain other species of the genus, especially the *Oxyrhina varians* Jan. This latter form is variable and is widespread, occurring in Hidalgo, México, Veracruz, Tlaxcala, Puebla, Morelos, Distrito Federal, Guanajuato, Michoacán and Jalisco.

C. nasus is known from Michoacán, Jalisco, Guanajuato and Durango and overlaps the territory of *varians* in the southern part of its range. The two differ greatly in size and in dorsal and ventral coloration, and markings. I have seen only one specimen of *varians* (in more than 100 specimens), with the internasals and prefrontals fused—this a specimen from far out of the range of *nasus*. I have seen no specimen of *nasus* (with the median, dorsal, dark quadrangular spots, and with the dark quadrangular marks on the ventrals) that failed to have them fused (20 specimens).

The two forms may occur on the same hillsides in the same identical habitats (under rocks).

It is probable that with an accumulation of specimens, subspecific forms may profitably be separated in both species.

The specimen recorded here is the most northern record. Ventrals, 126; subcaudals, 34; such differences as obtain between this specimen and other specimens I have from other parts of Mexico, may be due to age (i. e., shorter, slightly less pointed snout).

Diadophis regalis arizonae Blanchard.

Diadophis regalis arizonae Blanchard, Occ. Papers Mus. Zool. Univ. Michigan, No. 142, July 9, 1923, p. 2.

Two specimens are referred to this subspecies. Nos. 18966 ♀, 23045 ♂. They have respectively the following counts and measurements (in mm.): Ventrals, 224, 211; subcaudals, 62, 64; upper labials, 8 (left) -7, 8-8; lower labials, 9-9, 8-8; preoculars, 2, 2; postoculars, 2, 2; total length, 530, 598; tail, 89, 108; width of head, 8, 9.5; length of head, 14.6, 17.

Elaphe chlorosoma Günther.

Coluber chlorosoma Günther, Biologia Centrali-Americana, Reptilia and Batrachia, Feb., 1894, pp. 115-116, pl. XLI).

A large female specimen (No. 23062) was collected at Moguarichic, Chihuahua. It was found dead and partly eaten, so that the continuity of the ventral scale series is broken. The squamation of the head is typical.

Thamnophis eques (Reuss).

Six specimens of this species have been collected. These are Nos. 18962, 18963 and 23063-23066.

They are typical in every way with specimens from Southeastern United States. The exact type locality is unknown, but the type is from Mexico.

Thamnophis multimaculata (Cope).

Atomarchus multimaculatus Cope, Amer. Nat. 1883, pp. 1300-1301.

This form, which Cope designated as the type of a new genus, has for a number of years been regarded as a synonym of *Thamnophis angustirostris* Kennicott. An examination of the type of the latter species shows this relationship does not exist.

The single specimen present, No. 23015, has a median postrostral scute

separating the nasals, and likewise separating the internasals from the rostral. This contains a deep circular pit; a pair of pits are present in the parietals. This is regarded as probably anomalous, since the presence or absence of the median postrostral varies. In a specimen in the National Museum the pit is present in a specimen from Arroyo del Alamas, 70-74 km. south of Nueva Casas Grandes, Chihuahua, México (No. 42874). The pit is present in the postrostral scale, but the pits are lacking in the parietals.

The general appearance of the snake is far more like *Natrix* than *Thamnophis*. It may be a *Natrix* with a fused anal.

Tantilla wilcoxi Stejneger.

Tantilla wilcoxi Stejneger, Proc. U. S. Nat. Mus., 25, 1902, p. 156 (type description; type locality Fort Huachuca, Arizona).

Four specimens of this rare species (Nos. 18967-18970, are in the collection, and are, I believe, the southernmost records. The following data apply to the above specimens respectively: ♂, ♀, ♀, ♀; ventrals, 155, 164, 159, 159; subcaudals, 62, ?, 67, 64; mental touches chinshields; narrowly on one side; narrowly on one side, broad contact with both, broad contact with both.

This data with that given by Blanchard (Zool. Series Field Mus. Nat. Hist., XX, No. 28, Apr. 20, 1938, pp. 369, 376) gives the following ranges of ventrals and subcaudals for males and females respectively: 149-155; 157-164; 62-69; 58-67.

Crotalus molossus molossus Baird and Girard.

Two specimens are in the collection, Nos. 18911, 23053.

Crotalus willardi Meek.

Two specimens have been collected, Nos. 18964, 18965.

Crotalus triseriatus pricei (Van Denburgh).

One specimen, No. 23013 is in the collection. The ventrals are 164; the subcaudals, 22, of which only the last is divided. The scale formula is 24 (about head) 21, 23, 17, 17. The deep black stripe behind the eye is bordered by a narrow cream line above, while below it is bordered by a white stripe beginning below eye and continuing to the angle of the mouth, involving the posterior upper labials. The median, paired black spots are very narrowly edged with gray white, and are but little larger than the spots which form the three lateral rows. Outer scale row and outer edge of ventrals edged with grayish white. Total length of body and tail to end of rattle 427 mm.; tail and rattle, 47 mm.; rattle, 15 mm.